

NOVEMBER 1950

ARMY INFORMATION DIGEST

The Casualty Report Tells the Story

Major General Edward F. Witsell

Unified Sea Transportation

Air Research for Survival

Press Relations in Korea

Planning Your Personal Affairs

Highways for National Defense



THE RISE OF THE SOVIET ARMY



ARMY INFORMATION DIGEST



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PERSONAL PLANNING

"What can I do to protect my family?" is a frequently recurring question among servicemen. Besides the benefits granted under the Dependents Assistance Act of 1950 (see page 51) a host of related matters affecting the serviceman and his family is summarized in the article beginning on page 46.

INFORMATION ROLES

Significant aspects of the Army information function are dealt with in two articles in this issue. The Adjutant General describes the meticulous safeguards surrounding the reporting of battle casualties and the procedures followed to insure the next of kin are notified speedily and accurately. Another facet of combat reporting—press relations with newsmen, correspondents and the public—is appraised in "USAF Press Relations in the Far East."

SEA LANES

Eight months after it was unified, the Military Sea Transportation Service proved its mettle under the stern test of war necessity, moving troops and materiel to the Korean battlefield. In this issue, the Commander of MST describes the organization of this new service which is contributing so extensively to the mounting tide of victory on the Korean peninsula.

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CONTENTS

Page

George C. Marshall—Secretary of Defense	3
Robert A. Lovett—Deputy Secretary of Defense	6
The Casualty Report Tells the Story	7
By Major General Edward F. Witsell	
Air Research for Survival	11
By Colonel W. A. Carlson, USAF	
Highways for National Defense	19
By Lieutenant Colonel Joseph R. Bracewell, Jr.	
Free Koreans Meet the Test of Battle	25
Pictorial Section	
Unified Sea Transportation	33
By Rear Admiral William M. Callaghan, USN	
USAF Press Relations in the Far East	40
By Lieutenant Colonel Barney Oldfield, USAF	
What About Your Personal Affairs?	46
A Staff Article	
Aid for Dependents	51
Legislative Review	
The Soviet Military Organization:	
II—Rise of the Soviet Army	53



Department of Defense Photograph

THE HONORABLE GEORGE C. MARSHALL

GEORGE C. MARSHALL-- SECRETARY OF DEFENSE

FROM soldier to statesman to administrator and now to a combination of all three sums up the story of General of the Army George Catlett Marshall as once more he is summoned from retirement to assume a key role in the national defense.

It is perhaps significant that the man who as Army Chief of Staff directed the Nation's armies in smashing counterattacks against Japanese and Nazi aggression in two hemispheres is probably best known today as a leading proponent of reconstruction in the postwar world. As former Secretary of State, his name has become synonymous with world recovery efforts under the Marshall Plan. Until recently President of the American Red Cross, he has guided the programs of this agency dedicated to humanitarian assistance wherever personal calamity or national disaster strikes.

George C. Marshall—the soldier, statesman and administrator—started his military career in 1902 as a lieutenant in the Philippine campaign. Bringing to each task an incisiveness and clarity of mind, a studious conception not only of the immediate job but of its relationship to history and international events, he analyzed, compared, studied and prepared himself for the greater tasks ahead.

Between the Philippine campaign and World War I, Marshall completed courses at the Infantry-Cavalry School and the Army Staff College at Fort Leavenworth. Later he served as Chief of Staff of the Field Force in the Philippines. As World War I loomed he returned to the United States as Aide-de-Camp to General Franklin Bell, then served as executive officer of the Civilian Training Camp at Fort Douglas, Utah. In July 1917, he was detailed to the General Staff and sailed for France with the first convoy of the 1st Division.

After serving with the 1st Division until July 1918 he was given the task of transferring some half a million troops and 2,700 guns to the Argonne front in preparation for that offen-

sive. He later said that this job was easier than whipping a green division, lacking materiel, into shape.

In 1919 he became Aide-de-Camp to General of the Armies John J. Pershing, with whom he served until 1924.

During the war years he formed the hard core of his basic philosophy as a soldier. Later he was to say "Whenever changes are proposed, modern theories advanced, or surprising developments are brought to my attention, I automatically search for the fundamental principle involved in the particular matter at hand." He liked to illustrate the point by recounting how the French ordered the 1st Division to assume three different "defense in depth" concepts, which involved a prodigious amount of pick and shovel work. The last concept, he stated, was "expressed literally in the language of the Field Service Regulations of the United States Army in 1914. Now in that critical summer of 1918 we were back again to first essentials."

Named Chief of Staff in 1939, he frequently drew upon his experiences in France as unremittingly he sought to assure the Nation's security with a sound Army. He once said "The great tragedy in France during World War I was . . . the wastage of the tremendous potential advantage we had in quality of our personnel, because of the very limited opportunity the men had to prepare themselves. No one has ever really told the full truth of what might have been, and what actually was; and the fault was that of a nation in not giving these men a fair chance to prepare themselves."

He was convinced that he would do all in his power to see that history would not repeat itself. In 1939 when the United States Army consisted of about 175,000 troops and 1064 planes, with very little automotive equipment and other materiel, he sought to develop public awareness of the need for full preparedness. It was not until May 1940, when the German army overran France and destroyed the bulk of the heavy equipment of the British army at Dunkirk, that he was able to make any material advances with his plans. In the summer of 1940 he urged establishment of Selective Service and the federalization of the National Guard for a year of training. The Congress acted to increase Army strength to about a million and a half men. To provide the training facilities for this force was a gigantic task; but it was dwarfed by the task that General Marshall faced when the United States did become involved in war. By 1945 the Army had increased to eight and a quarter million men and 69,000 planes.

During World War II he not only directed the building up, training the strategy of American arms but took part in those momentous meetings when the master strategy of the war was discussed and mapped out. He accompanied President Roosevelt on his trip to confer with Prime Minister Churchill at sea in 1941 when the Atlantic Charter was formulated and the first meeting of the British-American Chiefs of Staff occurred. He participated in the conferences establishing the principles of unity of command—thus achieving what had required four years to accomplish during World War I. He took part in all subsequent conferences, including the Potsdam meeting of President Truman, Mr. Churchill, Mr. Attlee and Generalissimo Stalin.

While primarily the soldier in this period, he also was advising on matters of high state policy and he was absorbing the atmosphere of statesmanship—lessons that were to be put into use before he retired from the Army. In November 1945, at his request, he was released from duty as Chief of Staff and later in the same month President Truman appointed him Special Representative of the President to China with the personal rank of Ambassador. Thus, while still a soldier, he was fully launched on his statesman's career. For two years he strove to work out the delicate, complex problems of China and her future—problems that still are vexing the world. In January 1947, he was recalled to Washington.

He retired from the Army just prior to 21 January 1947 when he was summoned again by President Truman to assume the post of Secretary of State. His greatest role in that task was as founder and proponent of the so-called Marshall Plan—the European Recovery Program—which gave renewed hope to half a continent and restored the economic life of nations.

In October 1949 he accepted the post of President of the American Red Cross. He saw in that organization the great humanitarian possibilities which he had always felt, as expressed in one of his own statements in 1939: "War is a deadly disease. . . . We should do everything in our power to isolate the disease, protect ourselves against it, and to discover the specific which will destroy it."

With the Nation facing new trials in its role as defender of world peace in the vanguard of United Nations forces, George C. Marshall again responded to the call of the President and the Congress, assuming his latest role as Secretary of Defense on 21 September 1950.



USAF Photograph

THE HONORABLE ROBERT A. LOVETT

DEPUTY SECRETARY OF DEFENSE

THE appointment of The Honorable Robert A. Lovett as Deputy Secretary of Defense brought together two men who had served previously as a team; for Mr. Lovett was Under Secretary of State while General Marshall was Secretary.

A veteran of World War I, Mr. Lovett took up flying in 1916. He received his Naval wings in 1917 and was commissioned an ensign in the U. S. Naval Reserve Force. He arrived overseas in August 1917 where he also received his wings as a French military aviator. He later served with the Royal Air Service and subsequently was named commander of U. S. Naval Air Squadron 1 of the Northern Bombing Group.

In 1921 he entered business, eventually becoming a partner of Brown Brothers, Harriman and Company in New York City and a director in a number of railroad and insurance companies.

In 1940 he was appointed special assistant to the Secretary of War and in April 1941, he became Assistant Secretary of War for Air in which position he served through World War II. From July 1947 to January 1949 he was Under Secretary of State for Secretary Marshall.

Throughout his career, Mr. Lovett maintained a personal interest in aviation. He was one of the group of aviation enthusiasts who financed an experimental plane in hopes of winning back the Schneider Cup. On trips abroad he studied developments in European commercial and military aviation. He continued his advocacy of air striking power while he was Assistant Secretary of War for Air and prevailed upon manufacturers to pool their plants and experiences in production of long-range bombers.

THE CASUALTY REPORT TELLS THE STORY

By

MAJOR GENERAL EDWARD F. WITSELL
The Adjutant General

A SHELL bursts in the midst of a crowded position, a plane falls in flames, a tank blows up, a ship suffers a bomb strike, a group of injured must be left behind in a hurried withdrawal—any one of a thousand different events that occur during the confusion of a battle results in casualties. And each casualty, in addition to being a personal tragedy for the fighting man and his loved ones, becoming also a statistic. Each and every casualty must be verified and listed—quickly and accurately. Forms must be filled out, records must be maintained, follow-up checks must be made. The work that goes on before a casualty list can be released by the Department of Defense is detailed, involved and must be of the utmost accuracy, regardless of the necessity for extreme speed in notification to emergency addressees.

Even after the personal tragedies have been erased by the passage of time, the figures are important. They are studied for comparison with other wars. They are studied for comparison of losses among various units. They form part of the large pattern that students of the art and science of war peruse as they endeavor to map out plans for reducing casualties in future campaigns and in future wars.

The Department of Defense is constantly striving to make the compilation of casualty reports more efficient, to minimize the chances for error and to reduce the time lag between the actual casualty and the notification of the next of kin. Today the reports are being transmitted from Tokyo by electrical message so that the lists can be released in even shorter time than if transmitted by other media.

All of this is, of course, a far cry from the days of the Civil War, when one of the main functions of the civilian news-

paper war correspondents was to visit the battlefields and hospitals and compile lists of the dead and wounded to publish in their newspapers. Today the correspondents in Washington are presented with the lists as soon as the Department of Defense can compile them. Nowadays the family of a fighting man need not read the newspapers in fear and trembling lest they discover their loved one's name in the lists. Prior to public release the emergency addressee receives notification by telegram, followed by confirming letter and in cases of wounded personnel by airmail progress reports. Each wire or letter is written by some responsible person.

Even so, the Department of the Army is moving to increase the efficiency and speed of casualty reporting. Experiments are being conducted in photoelectric transmission of the typed message from the Army Adjutant General's Casualty Section to commercial telegraph companies. The casualty reporting system now in effect is substantially the same as was used during World War II, with one slight exception. In that war, machine record cards were sent through theater headquarters to the War Department. Today, however, the Commander in Chief, Far East Command, transmits battle casualty reports (and some non-battle reports) by electrical message. A series of five-letter code words has been devised to cover all possible categories of battle casualties from "killed in action" to "seriously ill." Other code words cover non-battle casualties; still others describe the nature of the casualty itself, pay and duty status of the individual and progress toward recovery.

As a result, casualty records now flow swiftly to Army headquarters in Korea, then to Tokyo and on to the Adjutant General's Office where they are made ready for the Department of Defense to disseminate to news media after the emergency addressee has been notified.

Gathering the actual records on the battlefield, however, is always going to be difficult and time-consuming. Often bodies of the slain cannot be located. Sometimes men will have just simply disappeared. Are they dead or captured or AWOL? In current instructions to field commanders, the Army states that a person is to be reported as dead "when there is reasonably conclusive evidence of death" or else when circumstances can "lead to no other logical conclusion." Recovery of remains is not actually needed to cause a report of death. In many instances, the companions of the man may establish the evidence. Thus the reporting of casualties is not only

a command function but a function of every person in the Armed Forces.

Commanders are cautioned to exercise extreme care in defining casualties. Even if a plane crashes and it appears certain that there is no possibility of anybody getting out alive, unless the wreckage can be examined it is not to be presumed that all aboard are dead. The same applies in the case of a burnt-out tank. Nor does the fact that, in a hurried and confused withdrawal, desperately wounded men are left behind establish that they are therefore dead.

Units in the field endeavor to sift the facts of their own casualties. Each unit reports through command channels the names of those missing and those known to have been killed, the names and disposition of the wounded, and so on. The service record of each casualty victim is sent to division headquarters with proper notations. Division headquarters in turn forwards reports to Tokyo. All along the line hospitals, Graves Registration units and other groups are also sending in reports. Sometimes these serve to confirm reports received from units; sometimes they furnish the first definite information on a soldier who has been reported on as "missing in action;" sometimes they indicate a change in status of a previously reported casualty as when "seriously wounded in action" must be changed to "died as a result of wounds received in action." All battle casualties and certain non-battle casualties are transmitted from Tokyo to The Adjutant General by electrical message with battle casualties getting priority.

The work of keeping the lists and records does not stop with the initial report to Washington. What about those missing persons, many of whom eventually return to their units? Each one must be accounted for in another report. Sometimes it is definitely established that certain missing persons are dead, others captured or hospitalized. That means more reports, more follow-up work, more checking and rechecking. According to Army instructions, if there is not reasonably conclusive evidence of the death of a missing person, a report of all facts must be made.

The Theater Commander is empowered to send notification of a casualty to the emergency addressee if he or she is living within the command; otherwise notification is sent out by The Adjutant General of the Army in Washington.

Besides the official notification to the emergency addressee in cases of death, the Army insists that a letter of sympathy

be written by the serviceman's commander and sent out by air-mail. This letter may mention the form of burial, what sort of religious services were performed, general location of the burial place and any other information that does not affect security. These sympathy letters are routed through appropriate check-points to insure that The Adjutant General has previously received and transmitted the report to the next of kin.

The Army sees to it that families of wounded men are not just notified and then forgotten. The hospital commander must send out a periodic progress report to the family—at least every 10 days in the case of those seriously wounded or ill or who may for any reason be unable to write personally. In non-technical language, this letter gives a report on the soldier's physical condition, the treatment he is receiving and the prospects for his early recovery. When it becomes apparent that the patient is able to write personally, the hospital commander urges the individual to correspond with his family; but if the patient fails to do so, the commander continues his reports to the family. When the patient is released or transferred to another hospital, the next of kin is notified.

The Army even gives consideration to the effect that returned mail may have upon the senders. Great care is taken to route mail through appropriate check points so that it is certain that The Adjutant General has been properly notified before mail is returned bearing such remarks as "Killed in Action," "Missing in Action," or other notations.

Throughout its operation, the system is designed to enhance the speed and accuracy of casualty reporting so that the anxiety of survivors may be dispelled and so that families hopefully waiting for word as to the welfare of their loved ones may have the solace of information that is accurate and complete.

AID

The comfortable assurance of a pushbutton war is an illusion. The enormous complication of the machinery of total warfare of today rests upon manpower—not in the mass, but diffused through thousands of specialties.

Secretary of Defense James Forrestal, March 1948

AIR RESEARCH FOR SURVIVAL

By

COLONEL W. A. CARLSON

THE Aero Medical Laboratory, an operation of the Air Materiel Command at Wright-Patterson Air Force Base, Ohio, has a mission that can be summed up in one word—survival.

To the Laboratory scientists, survival is a big word with a broad meaning—a word that means, in essence, everything a flyer must have to keep him alert and alive in planes that perform in extremes of altitude, speed and temperature. It also means survival for the downed airman in the tropics, in the Arctic, on land or on water.

To fill this order, the Laboratory has a dual responsibility in the field of military aviation medicine—it performs research and it develops items of personal flying and safety equipment.

From its beginning 15 years ago as a three-man unit in the Air Materiel Command, the Aero Medical Laboratory mushroomed to a personnel peak of almost 300 in World War II. It now occupies six buildings and its staff includes a wealth of scientists—doctors, physiologists, psychologists, biophysicists, biochemists, anthropologists, mathematicians, nutritionists, textile specialists, and engineers in mechanics, aeronautics, acoustics and electronics.

The scope of the Laboratory's activities ranges all the way from studies in the growth of soilless tomatoes to development of modern high altitude oxygen equipment. In the field of oxygen systems, for example, the Laboratory's studies of cabin pressurization contributed immeasurably to our success in the skies over Germany and Japan during World War II. Normally at 30,000 feet even pure oxygen will barely keep a man alive, because the pressure at that altitude is so low that

COLONEL W. A. CARLSON, USAF, is Chief of the Aero Medical Laboratory, Air Materiel Command.



USAF Photograph

This device enables airmen to duplicate emergency escapes using a pilot ejection seat.

insufficient oxygen is forced through the membrane between the air sacs of the lungs and the blood stream. More pressure has to be provided. Through research and development over a 10-year period, the Aero Medical Laboratory met the need, introducing methods of pressurization that opened broad military and commercial vistas by making flight at high altitudes both possible and comfortable.

With cabin pressurization, however, came related problems. What would happen, for example, if the cabin seal were ruptured by enemy fire or by some other means? That, too, was answered by Laboratory scientists during World War II. Exhaustive tests proved that the human body can normally stand such "explosive decompression" without pain or injurious after-effects at fairly high altitudes.

A new aspect of the problem of explosive decompression in high altitude flight is anticipated when jets begin operating at altitudes between 45,000 and 50,000 feet for periods of several hours. Under such conditions it may prove necessary, even in combat, to keep the cabin pressurization continuously at the 30,000-foot level or below to ward off decompression sickness. To achieve this effect, aero medical scientists believe it may be necessary to develop some form of tight-fitting clothing as physical protection for aircraft personnel.

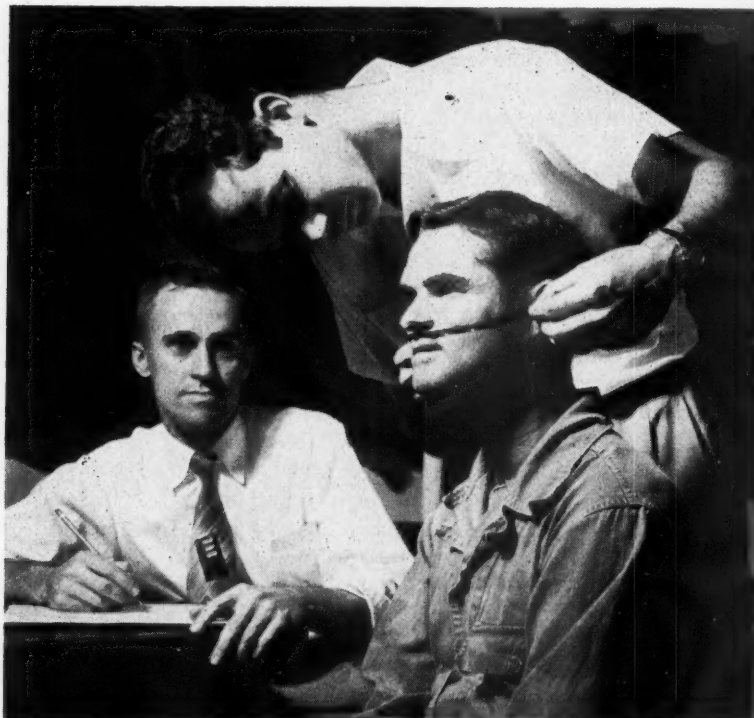
A pressure-demand oxygen system, consisting of a mask and oxygen regulator developed by the Aero Medical Laboratory, is now the standard oxygen installation in all jet aircraft. To afford emergency protection against anoxia, the dread enemy of the substratosphere, various types of oxygen systems have been perfected to the point where they are effective for a minimum of 10 minutes at 50,000 feet in case cabin pressurization fails.

Perhaps the most striking research task introduced by jet aircraft was the problem of emergency escape. The famed pilot ejection seat was developed jointly by the Aero Medical and Aircraft Laboratories in conjunction with the Frankfort Arsenal, Philadelphia. Its first human trial took place in 1946 when Sgt. Lawrence Lambert was shot out of an F-61 while traveling at a speed of 300 miles an hour over Patterson Field. For this feat, Lambert later received the coveted Cheney Award.

Constant research and development is continuing to pay off with improved methods of escape from high-speed, high-altitude planes. Last year an Aero Medical Laboratory officer,

Captain Vincent Mazza, was shot from a TF-80 traveling at 555 miles an hour over Hamilton Air Force Base, California. Currently, Air Materiel Command engineers are testing the ejection seat at speeds exceeding that of sound on a two-mile track at Edwards Air Force Base in the California desert. For these tests, ten 10,000-pound rockets will soon be used to propel a 2300-pound sled along the track at a speed approaching 1100 miles an hour before a dummy is ejected.

A training program, designed to build flyers' confidence and take the mystery out of ejection seat escape, is now under way at Wright-Patterson Air Force Base. Ensnared in an ejection seat attached to a 100-foot-high track, the pilot learns correct body position, proper pressure against the head rest to avoid neck injury and how to operate the trigger. This trigger actuates a mechanism that propels him upward about



USAF Photograph

One of the numerous measurements required in establishing standards for the design of masks and helmets is recorded at the Anthropometric Unit of Air Materiel Command.

60 feet on the track in a split second, introducing him to this new device that offers the only positive method of escape at transonic speeds or under positive gravitational pull during a spin.

Another Aero Medical Laboratory contribution to flying safety is the G-suit, an anti-gravity device that safeguards a pilot from blacking out in sharp dives and turns by applying pneumatic pressure to his abdomen and legs. This helps the heart to maintain circulation to the brain and prevents the blood from pooling in the lower extremities.

The Laboratory also is conducting an anthropometric survey of flying personnel to determine what measurements constitute small, medium, large and very large so that each type of individual can be better fitted with new items of personal flight equipment. At present, a survey team led by Air Materiel Command specialists and manned by students from Antioch College, Yellow Springs, Ohio, is in the field visiting approximately 16 Air Force bases to gather data. The current survey which will comprise some 660,000 individual measurements gleaned from 5000 flying personnel, will result in a new manual for design of flight equipment and aircraft interiors.

The prone position pilot's bed, another outstanding development of the Laboratory, consists of specially shaped metal sides supporting a length of nylon netting. Equipped with a counter-weighted headrest, special jaw support, adjustable foot rests and three-dimensional controls, this flight aid has been tested by pilots for as long as eight consecutive hours without discomfort. Centrifuge tests have shown that flyers in this bed can tolerate 12 gravitational units for 20 seconds without blackout.

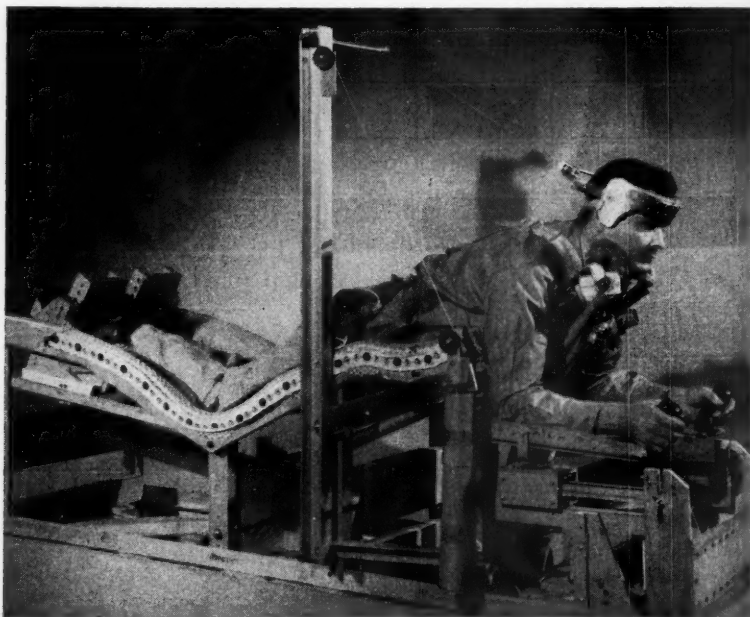
In the field of human engineering, the Aero Medical Laboratory is probing the psychological relation of man to his machine. As a result, new requirements are being established for design of flight controls and flight instruments. With human reaction time a critical factor at supersonic speeds, only a few seconds may elapse between the time an approaching aircraft becomes visible and the time it has passed by. Pilots must pick up approaching aircraft visually or detect pips on a radar scope; they must decide what action to take and then initiate and complete the correct response in a matter of seconds. For this they need instruments that are "human engineered" for the age of speed.

In the Aero Medical Laboratory's "airborne psychology

laboratory," a C-47 is equipped with electronic scoring devices which record actual pilot responses to a series of tests involving reaction times, onset of fatigue and the like, thus verifying conclusions reached in ground laboratory experiments.

The design and development of special clothing to protect airmen from extreme temperatures, exposure and low barometric pressures is another important field of activity. In recent years, the Laboratory has been instrumental in developing electrically heated flying suits, Arctic clothing, over-water flying suits equipped with flotation bladders, an air-conditioned garment that will keep a flyer comfortable at temperatures ranging from -30° to $+150^{\circ}$ Fahrenheit, anti-exposure suits and even an 18-layer crash rescue suit which enables the wearer to walk into flames and remain there for more than two minutes withstanding temperatures up to 2000° Fahrenheit.

In an era when long-range flights keep crews airborne sometimes for days at a time, the problem of satisfactory in-flight feeding has become a major concern. Answering the need the Aero Medical Laboratory has developed a whole line of



USAF Photograph

Using a system of counterweights and controls, this prone position pilot's bed is designed for comfort and operating efficiency in high-speed aircraft.

in-flight food-warming ovens and nutritious flight rations. Larders are stocked with tasty menus of pre-cooked and frozen foods that include meat dishes like boned chicken, beef and pork loaf, meatballs and spaghetti, chopped ham and eggs, as well as fruit courses, desserts and beverages.

Postwar research at the Laboratory delves into the field of ultrasonics. When jet aircraft were first introduced, this form of sound was thought to be a significant flight hazard. However, Laboratory scientists exploded that bugaboo with a biophysical analysis and reevaluation of the entire sound spectrum that occurs during jet flight. The study revealed that the real sonic hazard may come from the lower sub-auditory frequencies rather than from the so-called ultrasonic. Present knowledge indicates that the ultrasonic frequency components constitute no serious hazard to man, but these same levels of acoustic energy have killed fur-bearing animals. Additional experiments evaluating the effects of very low frequency sound and other vibrations on man are now being carried on in the Laboratory's sound chamber and in the field.

Although the Laboratory's research is always geared to wartime eventualities, many of its by-products have found their way into industry and even into the American household. What is now known as the aerosol bomb was developed at the Laboratory during World War II to provide a method for quick, efficient disinfecting of aircraft which had come from yellow fever and malaria regions. A lightweight, easily portable pneumatic balance resuscitator devised to aid victims of anoxia is now widely applied in polio treatment. A more recent development, a ventilated garment which enables men to withstand great heat, is expected to have widespread application in industry. In addition, the Laboratory's extensive work in the field of respiratory physiology has contributed many new concepts to medical science.

To determine how men and materials will react in a variety of circumstances, the Laboratory maintains a group of test chambers where scores of different environmental conditions can be produced. Three decompression chambers simulate altitudes and explosive decompression up to 100,000 feet. Of these, a large 20-man chamber is used for training flying personnel and representatives of commercial organizations and universities in the proper use of oxygen equipment. Two smaller chambers are reserved for testing equipment at high altitudes. The Laboratory also has a refrigerated altitude

chamber where the mercury can be nose-dived to -80° Fahrenheit, and an all-weather room which runs the gamut in temperature from $+200^{\circ}$ all the way down to -70° . Here every conceivable weather condition—rain, snow, sleet, hail, sand storms—can be simulated.

Other testing devices include an ingenious centrifuge machine that looks like a big two-arm rotary swing. Carrying up to 700 pounds in each of its two cabs, it can accelerate from zero to 10 units of gravitational pull in one second. The machine is used for simulating the positive and negative gravitational forces that act upon airmen during sharp turns, pull-ups and dives or other sudden maneuvers at high speeds.

These and other test facilities are used extensively in the development of equipment and clothing and in physiological research. In studying methods of overcoming the rigors of Arctic flight, for example, subjects are kept in cold chambers for several days at a time while they are constantly checked by medical technicians. Equipment thus developed is tested in the field under actual outdoor conditions.

Through such research, the Aero Medical Laboratory carries forward its mission—to fortify still further the airman's chance for survival in planes that are flying higher, faster and farther than ever before.

AID

THE ROLE OF RESEARCH

Our experience in World War II brought home to us that our productive capabilities are limited by three important components—men, machines and materials. With limited capabilities, we must learn to use those components more efficiently. Toward that end we have directed the Army's research and development program. By that program we place emphasis upon those items which offer the greatest possible yield in terms of national security. Briefly, we eliminate non-essentials and concentrate our major effort where it will do the most good.

If our strategic plans are to be most effective, they must be designed to exploit the full range of capabilities of new developments. Conversely, our research and development plans must stress those developments which will best support our contemplated strategic operations. In effect, the strategic planners determine *what* we will do and *how* we will do it. The research and development planners must provide superior means which assure the successful execution of those strategic plans.

Major General Charles G. Helmick, Chief, Research and Development Division, Office of the Assistant Chief of Staff, G-4.

HIGHWAYS FOR NATIONAL DEFENSE

By

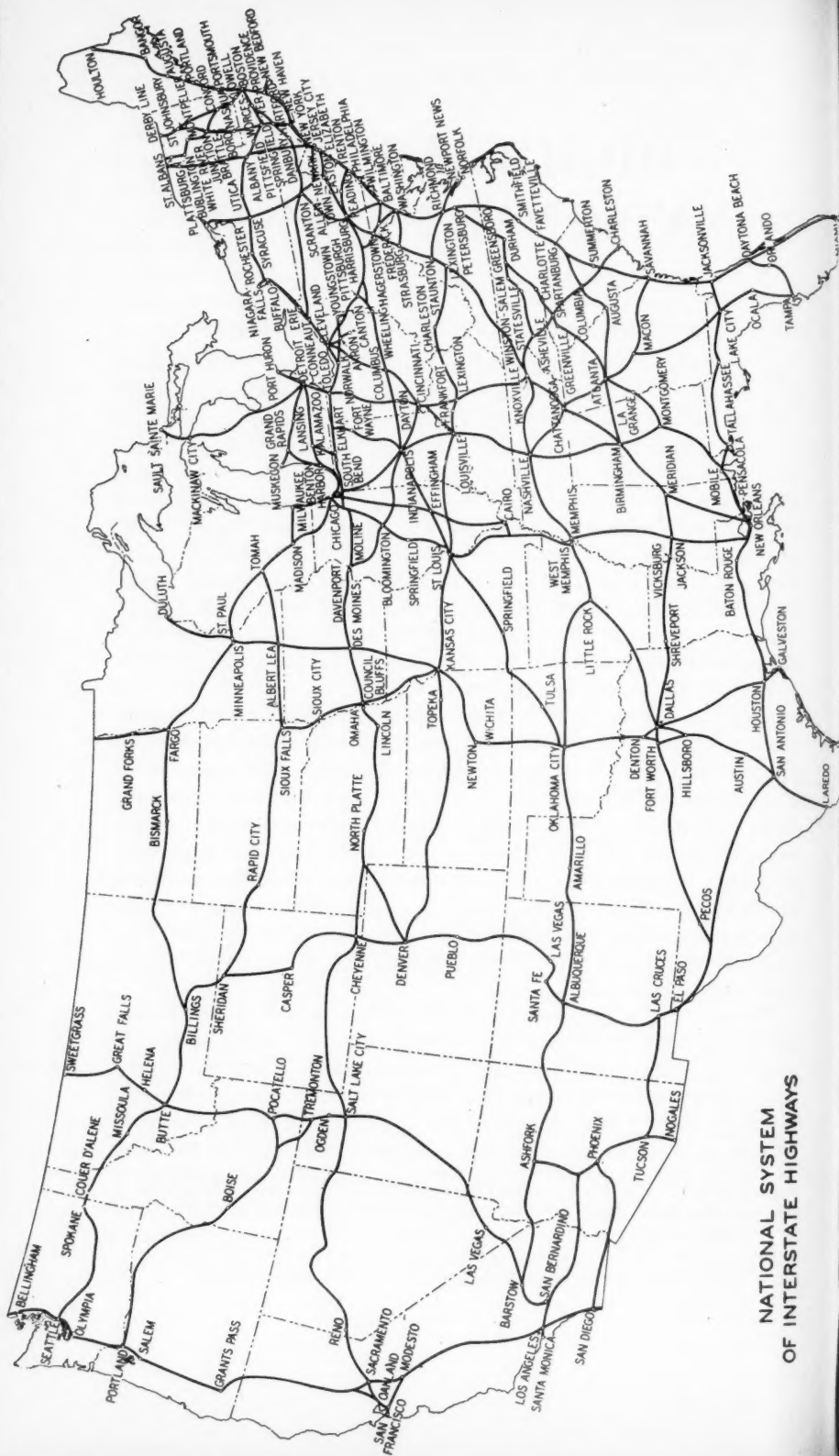
LIEUTENANT COLONEL JOSEPH R. BRACEWELL, JR.

A little-heralded but nonetheless strategic asset of the United States is its highway network, extending well over three million miles into every state and county. Today there is scarcely a community or activity that is not accessible by highway. Yet until the turn of the century the growth of this road network was a slow, disconnected process and at times it seemed doomed to a minor role supplementing rail and water transportation. The appearance of the automobile, however, brought increasing and unrelenting demands for more and better roads. Since 1916, when the Government embarked on its Federal-aid highway program, the Bureau of Public Roads and the state highway departments have cooperated in building the greatest system of highways in the world.

Great as our highway system is, it is deficient by comparison with today's requirements. It has been outdistanced by the phenomenal growth of the automotive industry and has suffered the impact of World War II during which highway construction and maintenance were practically discontinued. Moreover, funds for public highway improvement have seldom been available in amounts sufficient to keep pace with the demands of highway traffic. Today, while some 30 billion dollars a year is being expended for vehicles and their supplies and services, only about 10 per cent of that amount is being provided for highway purposes.

Because highway construction from the earliest colonial days until after World War I was based on local needs, improvements were frequently isolated and unrelated. Looking toward the formation of a nation-wide highway network, the Federal Highway Act of 1921 provided for the designation of a selected system of Federal-aid highways in each state. The Act also

LIEUTENANT COLONEL JOSEPH R. BRACEWELL, JR., TC-USAR, is Highway Engineer, Highway Transport Service Division, Office of the Chief of Transportation.



NATIONAL SYSTEM
OF INTERSTATE HIGHWAYS

provided that preference be given to "such projects as will expedite the completion of an adequate and connected system of highways interstate in character."

From the very outset, national defense considerations have entered into the overall planning of interstate highways by the Bureau of Public Roads. Following World War I, the War Department indicated the general location of routes having strategic importance on the "Pershing Map"—so called because it bore the signature of approval of General Pershing—and all of these routes were included in the designated Federal-aid system. Several additional routes were subsequently added and on 15 May 1941 there was evolved a "Strategic Network" of highways comprising some 78,000 miles. The Defense Highway Act of 1941 gave special consideration to the development of this network by increasing the Federal-aid share of cost from 50 to 75 per cent. Improvements on the Strategic Network during World War II, however, were necessarily limited to the most essential needs because sufficient materials and manpower for highway purposes were not available.

Marking the emergence of postwar highway planning, the Federal-Aid Highway Act of 1944 provided for the continuation of the regular Federal-aid programs on a somewhat larger scale. It further provided that "There shall be designated within the continental United States a National System of Interstate Highways not exceeding forty thousand miles in total extent so located as to connect by routes, as direct as practicable, the principal metropolitan areas, cities, and industrial centers, to serve the national defense, and to connect at suitable border points with routes of continental importance in the Dominion of Canada and the Republic of Mexico." By joint action of the Bureau of Public Roads and the state highway departments and with the advice of the Defense Establishment, the National System of Interstate Highways has been designed to serve to the maximum extent both the Nation's economy and its defense. (See map opposite.)

A prodigious task confronted highway engineers, state and Government officials and members of Congress before the system could become a reality instead of so many lines on a map. Applying the standards recommended by the American Association of State Highway Officials and the Bureau of Public Roads, it was apparent that the greater portion of the 40,000 mile system was deficient in one or more respects—width, curvature, sight distance, gradient, clearance or bridge capacity.

The standards of construction for the National System of Interstate Highways, as recommended by the American Association of State Highway Officials and the Bureau of Public Roads, include the following:

A lane width of 12 feet on rural and urban highways, except that on lightly traveled two-lane rural highways, lane width of 11 feet is acceptable. Where estimated traffic exceeds the capacity of a two-lane highway, there should be four lanes separated by a median strip. Three-lane and undivided highways of four or more lanes are considered undesirable.

Roads should have a shoulder width of at least 10 feet. Rural right-of-way widths should be at least 200 feet for a two-lane and 250 feet for a four-lane highway. Moreover, surface strengths and foundations of principal highways should be adequate for the support of 18,000-pound axle loads—the same limit, incidentally, that the Army imposes on its general purpose vehicles.

In furtherance of the highway improvement program, the Federal-Aid Highway Act of 1948 directed the Commissioner of Public Roads "to cooperate with the state highway departments in a study of the status of improvement of the National System of Interstate Highways," and "to invite the cooperation and suggestions of the Secretary of Defense and the National Security Resources Board as to indicated or potential needs for improved highways for national defense."

In response to the directive of the Congress, the Commissioner of Public Roads has compiled a report entitled "Highway Needs of the National Defense."* The findings of this study heavily underscore many conditions which public officials and highway engineers have pointed to in every state. The report bluntly states that, when weighed against the minimum standards required, the interstate highway system "has been found seriously deficient." All but 2300 miles of the designated system were found to be in need of improvements requiring an estimated outlay of more than \$11 billion.

In his recommendations to the Commissioner of Public Roads contained in the same report to the Congress, the Secretary of Defense favored a relatively small connected system of interstate highways as essential to the national defense. The National System of Interstate Highways will in large part provide for that need, the Secretary pointed out.

* House Document No. 249, 81st Congress.

The Federal-Aid Highway Act of 1950 (Public Law 769—81st Congress) approved by the President on 7 September 1950 authorizes the expenditure of \$500,000,000 for the continuance of the Federal-aid highway program. The Act also authorizes the appropriation of \$10,000,000 for access roads to military and defense installations, which will require close coordination between the Bureau of Public Roads and the Department of Defense.

To coordinate defense highway requirements, certain functions and responsibilities have been established among Department of Defense agencies with the view to integrating such requirements into the overall domestic highway program. These responsibilities are broadly assigned as follows: The Army Assistant Chief of Staff G-3 determines strategic highway requirements. The Munitions Board has responsibility for approval of access road requirements. Finally, the Army Chief of Transportation is responsible for liaison with civilian highway agencies and integration of defense requirements into domestic highway programs.

It has long been the objective of highway-minded public officials and military planning staffs to bring about the development of an adequate system of highways throughout the United States which will serve the country in times of peace or war. The principal obstacle to the achievement of this objective is the magnitude of the task itself. According to latest estimates the task will require many billions of dollars and two or three decades, based on foreseen conditions. The Department of Defense is vitally interested in these public highway programs and will continue to cooperate with the Bureau of Public Roads, the state highway departments and others concerned with the improvement of highway systems of the United States.

LOGISTICS—A KEY TO STRATEGY

It is the function of logistics to bridge the gap between two normally alien spheres of activity; to make intelligible to the producer the needs of the military commander; and, conversely, to inject into the calculations of the strategist an appreciation of the limits of the materially possible. Logistics is, at once, the military element in the Nation's economy and the economic element in its military operations.

*Vice Admiral E. D. Foster, USN, Chief of Naval Materiel
and Chairman, Distribution Policy Council, Munitions Board*

A black and white photograph capturing a group of homeless Koreans, likely during the Japanese colonial period, crowded into a box car. The scene is dimly lit, with light streaming in from the left, highlighting the figures. In the foreground, a man in a light-colored short-sleeved shirt and trousers, wearing a straw hat, stands with his back to the camera, leaning against the side of the car. A young child is perched on his back. To his right, another man in a white short-sleeved shirt and light-colored trousers, also wearing a straw hat, stands looking towards the camera. In front of him, a man in a white shirt and patterned trousers sits on the floor of the car, looking down with a somber expression. Other figures are visible in the background, packed closely together. The floor of the box car is cluttered with various items, including shoes and bags, suggesting a state of displacement and poverty.

HOMELESS KOREANS
JOURNEY IN BOX CARS

FREE KOREANS MEET THE TEST OF BATTLE

THE Land of the Morning Calm"—hitherto a rustic nation with thousands of hamlets but few cities or factories—is now a scene of demolished homes and devastated paddy fields. The tools of war strike a strange discordant note in the tranquil setting of this pastoral land, where the picturesque proverbs of the people ("Beware of a sword hidden behind a smile") mirror the ancient philosophy of a civilization that dates back to before the time of Christ.

Through forty years of Japanese domination and then five years of an uneasy armed truce, the South Koreans have been true to their timeless tradition and heritage. Despite the foreign influence of the Japanese, the people—from bearded patriarchs to shaven-headed boys—stayed stubbornly Korean.

The simple tillers of the soil were unprepared for the disaster which descended from the north on 25 June 1950. A once calm countryside suddenly became the scene of wrecked buildings and the vacant stares of futility born of war. Weary refugees dragging belongings salvaged from the debris of their homes trudged across the land.

Despite adversity and surmounting personal tragedy, the South Koreans mustered their forces, building airstrips and other vital installations for defense of their nation. Whether in uniform or not, they combined their efforts to gain the time necessary to mount the allied counterblow which was to sweep the invader from their country.

This is indeed a strange battle of peoples. To a larger degree than in most campaigns, there has been an intermingling with an enemy undistinguishable by outward appearance. Thus the aggressors infiltrating through allied lines were lost in anonymity, then reappeared as a striking force.

Life today is not an easy task in the strange setting of South Korea—but war is never easy on the unfortunate people who inhabit a war-torn land. These people today have met and passed the supreme test of battle.

All photographs in this section by Department of Defense agencies.



Receding clouds of smoke reveal the smoldering ruins of a Korean community. Below, householders swarm toward safety during early months of the invasion.



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Laboriously leveling ground and crushing rocks for the construction of runways, these Korean workers prepare a modern airstrip.





Machinery of war is deployed amid peaceful villages and farms. A half-track rumbles toward the front; howitzers cast ominous shadows over a paddy field.





The South Koreans welcome the arrival of liberating armies. Allied troops and equipment move forward by rail; an American tank rolls toward the front.



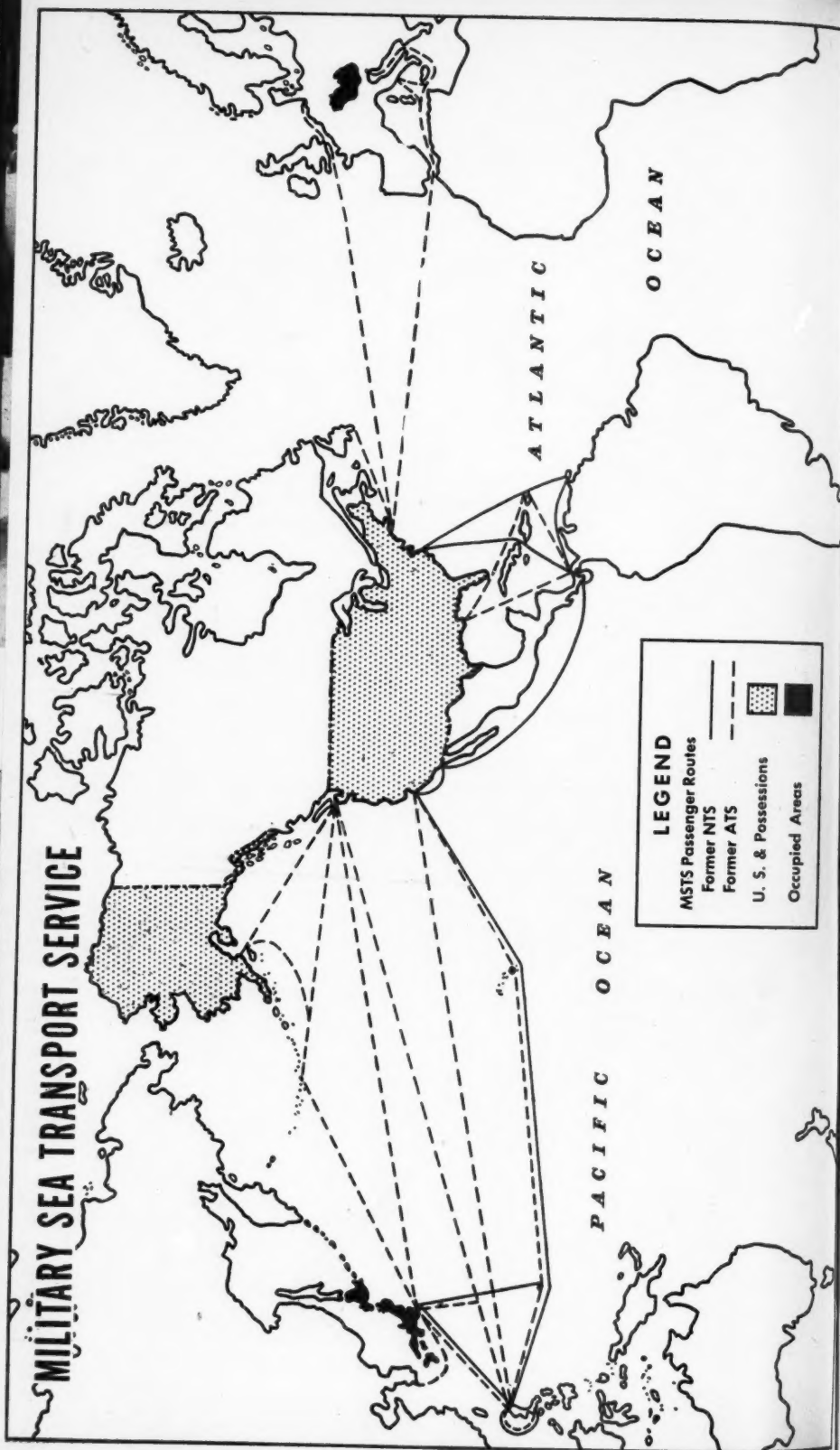


Soldiers of South Korea meet the test of a prolonged, bitter campaign. An army unit marches forward to repel the invader; troops prepare rice, main diet of the people.





A Korean MP examines refugees at a roadside check point.



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UNIFIED SEA TRANSPORTATION

By

REAR ADMIRAL WILLIAM M. CALLAGHAN, USN

ORGANIZED only a year ago, the Military Sea Transportation Service (MSTS) is today successfully meeting the challenge of transporting thousands of men and hundreds of thousands of tons of vitally needed war materiel from the



U. S. Navy Photograph

REAR ADMIRAL CALLAGHAN

United States to the combat area in the Western Pacific. A steady stream of men, ammunition, food, aircraft, tanks, gasoline, medical supplies and all other equipment necessary to the support of a major fighting front is moving across the Pacific in MSTS ships. Not one fighting man or piece of equipment has been delayed for lack of shipping and it is confidently expected that this record will be maintained.

On 1 June 1950, the eight-month old organization operated 174 Navy-owned and six chartered commercial vessels in fulfilling its responsibility as the single sea transportation agency of the Department of Defense. More than 1,000,000 measurement tons of military support cargo were moved to and from oversea areas during the first half of 1950. An additional 2,000,000 measurement tons of cargo of the Economic Cooperation Administration and the Mutual Defense Assistance Program were transported in

REAR ADMIRAL WILLIAM M. CALLAGHAN, USN, is Commander, Military Sea Transportation Service.

commercial bottoms in accordance with MSTs responsibility for the movement of such cargoes. During this same period, passenger transportation reached a total of 1,400,000,000 passenger miles. Included in this figure is the transfer of 63,000 displaced persons under the sponsorship of the International Refugee Organization.

Today a total of 215 MSTs ships and 232 chartered commercial vessels is engaged in military sea transportation operations. Chartered vessels include only cargo types. In the MSTs fleet, however, are transports, escort-type aircraft carriers, cargo ships, hospital ships and various types of smaller craft. In the first six weeks following the outbreak of hostilities in Korea, this fleet of over 400 ships carried more than 50,000 men, 500,000 measurement tons of cargo and 2,000,000 barrels of petroleum products to the combat area.

By direction of the Secretary of Defense, MSTs was established 1 October 1949 to "provide, under one authority, control, operation and administration of ocean transportation of personnel (including the transportation of sick and wounded), materiel (including petroleum products), mail and other cargoes for all agencies or departments of the National Military Establishment (excluding personnel and cargo transported by units of the fleet) and as authorized or directed for other Government agencies or departments of the United States subject to established priorities."

The directive further states that organizationally MSTs "shall comprise the Government-owned vessels now assigned to the Department of the Army and the Department of the Navy for the purpose of providing sea transportation for personnel and materiel of the Armed Services (except those vessels assigned to the combatant fleets of the Department of the Navy) and all other vessels acquired for the purpose, together with the personnel, facilities and equipment assigned to or procured for conducting its operations. The term 'vessels' . . . shall include those vessels and craft employed in transoceanic, intratheater, and coastwise operations but excludes those used or required by the Departments of the Army, Navy or Air Force in harbors or inland waterways."

The consolidation had the practical effect of combining into one organization the former Naval Transportation Service and that part of the Army Transportation Corps concerned with ocean transportation. The conveyance of 115 Army ships to the Navy was accompanied by the transfer of certain Civil



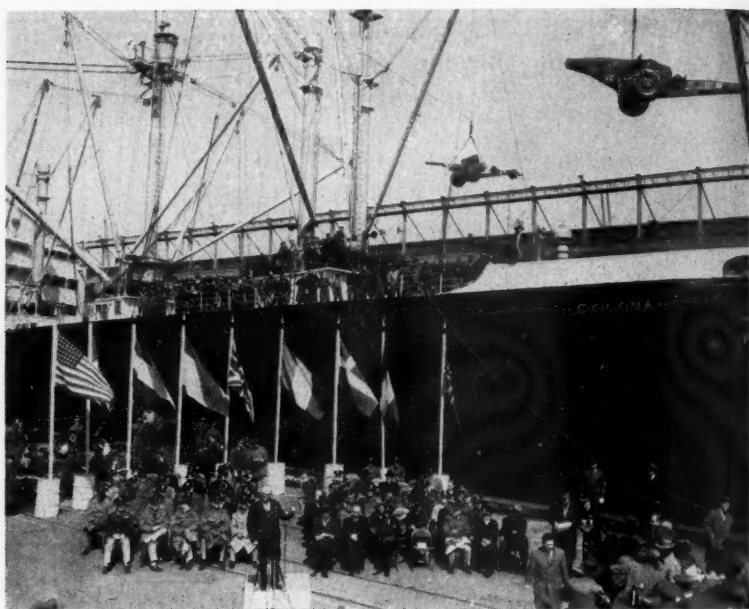
Department of Defense Photograph

Loading of troops and supplies is uninterrupted by darkness.

Service personnel engaged in sea transportation functions. Uniformed Army personnel were replaced by commissioned and enlisted personnel of the Navy. Approximately 10,000 Civil Service personnel employed as crews aboard Army vessels also were transferred to the Naval Transportation Service and they continue to serve aboard former Army ships.

Ships formerly in the Naval or Army transportation services are designated by the prefix USNS (United States Naval Ship), whereas the prefix USS (United States Ship) is used to designate commissioned vessels of the Navy which are manned by uniformed crews. Also designated USNS are those tankers owned by MSTs but operated under contract by commercial concerns which employ their own crews.

The Military Sea Transportation Service acts only as a carrying agent for the Armed Forces. It does not authorize or allocate space aboard its vessels for either passengers or cargo. These functions are performed individually by the three services according to mutual agreement. Should requirements exceed availability, additional space is procured by chartering space aboard commercial vessels. MSTs also is authorized to use its charter authority to transport passengers and cargo to various ports not visited by regularly scheduled MSTs ships.



Department of Defense Photograph

Shipside ceremonies at the New York Port of Embarkation marked the first shipment of war materiel to Atlantic Pact countries.

MSTS operates no terminal facilities of its own. The movement of Armed Forces cargo to the side of an MSTS vessel is a responsibility of the Department owning the cargo. Stevedoring service is arranged for by the port command when Government port facilities are being utilized and by the Department owning the cargo when commercial port facilities are used. Arrangements for loading and unloading rest with the activity furnishing the stevedoring service. The responsibility of MSTS for cargo begins when the cargo is finally stowed on board and accepted by the commanding officer and terminates when the cargo is accepted free on board ship at destination. MSTS obligations for passengers begin when they embark and terminate when they disembark.

MSTS is organized as a task fleet operating directly under the Chief of Naval Operations. In addition to the headquarters at Washington there are three general types of field activities—Deputy Commands, Port Offices and Representatives. The Deputy Commands are shore-based organizations normally located at certain primary ports and in the vicinity of Army

Ports of Embarkation, large Naval shipping terminals or both. Each Deputy Command also controls outlying field activities within a prescribed geographical area. Currently Deputy Commands in the Continental United States are at New York, New Orleans, San Francisco and Seattle; oversea Commands are located at Heidelberg, Hawaii and Tokyo.

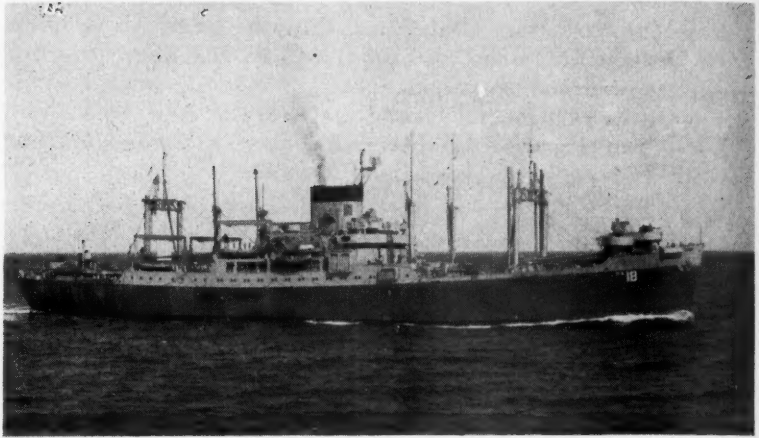
MSTS Port Offices are smaller organizations set up wherever there is enough MSTS business to warrant the establishment of a field office under a commanding officer. MSTS Representatives, usually only one or two individuals, are stationed at other ports or command centers for the transaction of MSTS business or for liaison with the command to which assigned.

MSTS passenger and cargo ships are operated in both the Atlantic and Pacific with an inter-coastal route linking the east and west coasts of the United States. Ports of call in the Pacific include Hawaii, Alaska, Guam, the Philippines, Okinawa and Japan. Those on the Atlantic schedule include Southampton and Bremerhaven. Ships plying the inter-coastal route visit San Francisco, San Diego, the Canal Zone, Puerto Rico, Cuba, Norfolk and New York. (See map.)



U. S. Army Photograph

Army troops board a MSTS ship for oversea movement.



U. S. Navy Photograph

The USS President Jackson—a troop ship in the MSTS fleet.

All ships except tankers are under the direct operational control of the Deputy Commanders. They are responsible for the detailed local operation of the vessels assigned to their areas and for their maintenance, repair, supply and inspection. They are also responsible for the recruiting, employment and assignment of civilian crews.

Because MSTS tankers are employed world-wide and are constantly shifted from one area to another, their operational control is retained by Headquarters. The Tanker Branch at MSTS headquarters receives a forecast of lift requirements directly from the Armed Services Petroleum Purchasing Agency in Washington and uses this data in positioning its tankers to fulfill these requirements.

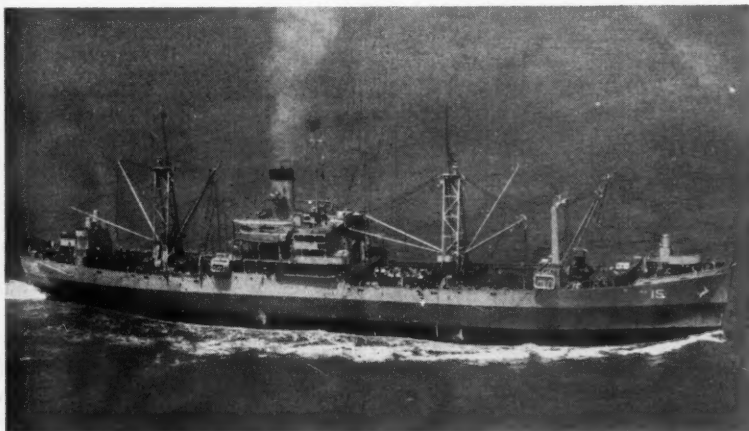
For a variety of reasons, the Defense Department must maintain sea transportation facilities and personnel. First and foremost is the necessity to provide ships for such special needs as the transport of troops or certain cargoes which, if met commercially with allowance for all risk factors, would involve a greater cost to the Government. Second, and this applies only to the Navy, the MSTS type of operation provides a nucleus of auxiliary type ships which can be gainfully employed in peacetime supply missions and which are immediately available for mobile support of the fleets during an emergency. Third, it is absolutely essential to have during time of peace an operating and administrative organiza-

tion within the military services which has the necessary technical experience and is capable of expansion immediately upon the outbreak of war or other emergency.

Events of the last several months strikingly illustrate the importance of such peacetime planning and organization. Under emergency conditions, vastly increased requirements for ocean transportation were met in a minimum of time and with no disruption in the overall military schedule.

Peacetime functions of the Military Sea Transportation Service include a continuing study of the American merchant marine to determine the suitability and availability of merchant ships for national defense purposes. MSTS also maintains liaison with the Federal Maritime Board, Coast Guard, Bureau of Customs, State Department and other governmental agencies interested in the development, regulation, operations or activities of merchant ships and the shipping industry.

Despite the trend toward air transportation, there is no doubt that the overwhelming bulk of American troops, supplies and equipment will continue to be transported by sea in the foreseeable future. Military necessity requires the uninterrupted logistical support of oversea bases. It will be the task of the Military Sea Transportation Service to insure that men and equipment are delivered when and where needed, enemy efforts to the contrary. The achievements of MSTS to date guarantee the successful performance of that mission.



U. S. Navy Photograph

The *USS Andromeda*—one of the MSTS cargo vessels.

USAF PRESS RELATIONS IN THE FAR EAST

By

LIEUTENANT COLONEL BARNEY OLDFIELD

BECAUSE the American people want to know what their sons, husbands and brothers in the Army, the Navy and the Air Force are contributing toward the ultimate victory of the United Nations forces in Korea and what is needed from the home front to support them, the role of press relations in the Korean conflict assumes a position of paramount importance. It is a role which can contribute materially to the eventual downfall of the enemy.

The 25th of June crept up on all of us unceremoniously and nobody knew then what the date portended for the future. Actually it marked the end of an era—for public relations personnel as for everyone else. For five years it had been possible for USAF public relations personnel to lean back and await the ringing of the telephone or the visit of a passing newspaperman with a question to pose. It was certain that the sun would come up tomorrow whether that hometown release went out or not.

Those in the Far East were the first to suffer disillusionment on this score. A casual glance at the manning charts on 24 June was comforting to the unwary. The PIO Tables of Organization positions were filled—albeit with more or less inexperienced personnel. As far off as the Far East, it seemed, one could hardly make a mistake big enough to reverberate all the way back to the States. Having to handle more than 30 correspondents on the prowl for news was unusual. On the 24th of June, you see, we were technically at peace with all the world. And hardly any place was as peaceful as our public information office.

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On that day an obscure handful of ambitious men—advised that the time was ripe—launched a full-scale assault across the 38th parallel against the South Koreans and the world had a police action on its hands.

Peace in the Far East was no more. In the public information offices—so calm a few hours earlier—was bedlam. Men did not leave their desks or phones for 24-hour stretches. Sleep, when possible, was snatched in cots in their offices.

The mere trickle of correspondents in the theater rose to more than 270 within a month. These media representatives were from the wire services, radio networks, syndicates, picture agencies and magazines, and they still recalled the kind of press relations aid which they had received from the military services in World War II.

The fighting in Korea was accompanied by a new spirit of enthusiastic activity in the heretofore humdrum routine of Far East news coverage. There was news in the making. That news was being eagerly awaited all over the world. On the service side, there was a fast multiplication of administrative details. Adding to the problem, many public information personnel had no background of experience in combat theater operations.

Quick action was taken by the Far East Air Force to cope with the problem. Within 24 hours Colonel (now Brigadier General) William P. Nuckols—a veteran of combat in Africa, England and Europe—was on a plane bound for Tokyo. Before leaving, he came into my office at The Pentagon. "I need some talent," he said. "Get me some and bring it out." It sounded like an order, but I felt it was more an expression of hope.

Having been public information officer at Exercise Swarmer in North Carolina, I knew where to get some personnel for the job. In that maneuver we had assembled a public information office entirely by levy. The staff consisted of 59 men, not one of whom had been requested by name; 28 were Air Force personnel. Nearly all needed training.

Obviously we could not risk a contingent raised by this indiscriminate method to perform the serious press relations job ahead in the Far East. Nevertheless, since the Commands had relinquished the men for Swarmer duty for 90 days, these men would be the easiest to reassemble as an operational public information crew on such short notice. At least it could

be said that they were better trained in June than when they had arrived in the Carolinas in March.

From Exercise Swarmer I came away with the conviction that there was a definite and continuing need in the Air Force for a public relations flying squad—a squad under the control of the Directorate of Public Relations, completely equipped, and made up of writers, radio men and still and motion picture photographers. The concept was based soundly on the principle of the mobile reserve. It would be a rallying point, a unit with the tools and ability constantly available to be flown anywhere in the world to hold down a firehouse job until orderly replacements could be made.

By resorting to this device the Air Force, with an economy of personnel, could afford to man, however sparsely, its public relations ramparts around the world. When troubles beset a particular sector, regularly assigned public relations staffs on the spot would be “beefed up” quickly by the dispatch of the mobile unit to that area. On the other hand, if the Air Force tried to man adequately with public relations personnel all the likely places of friction in the world, the demand for public relations specialists would be excessive, their talents ungainfully employed, and those staffs would in all likelihood be lacking in competence.

The needs in the Far East gave this idea new impetus and, with the approval of Brigadier General Sory Smith, Air Force Director of Public Relations, we began by telephone alerts and name requests to raise a 15-man group for the Far East. As was expected, some difficulties were encountered in getting the men released. Equipment problems, briefing, packing and the myriad details common to such a sudden and rapid movement consumed 20 valuable days before we were airborne out of Fairfield-Suisun Air Force Base, California.

The team consisted of five photographers, three radio men and seven writers, five of whom were graduates of the Armed Forces Information School. They were eager, and eagerness for such a mission should never be sold short. Every man in this team had literally begged to go. With that “self-starter” quality in an outfit, a great many seemingly insurmountable obstacles are overcome—if indeed they are even recognized.

This crew, with 1200 pounds of camera, radio and typewriting equipment, arrived in Tokyo in late July. Within five days after leaving the States, two of us were pounding typewriters on our knees alongside the airstrip at Taegu and

seven with typewriters, radio recorders and cameras were in Okinawa with the B-29s.

From recent experience, these are some of the public information essentials indispensable to the Air Force coverage of the United Nations police action in Korea.

First, there is the communique. It sets the stage upon which all the theater's activity is played. It is the commander's diary of his operational day. It is the dry statistics of battle. It is the sober, stately summary of activities for the archives. It is free from excess verbiage—factual, pertinent, informative. It is, nevertheless, a fatiguing, trying, unimaginative chore—a full-time job for one man. Importantly, the communique documents, for future study, the employment of weapons and manpower and accomplishments therefrom.

Second, it is important that the communique be made to live and breathe, that its bare statistics actually talk. This calls for heavy work in the fields of writing, photography and radio reporting in order to obtain accounts of individual exploits and the many human interest stories breaking in the fighting zone.

A steady requirement exists for a flow of quotes from the men who are doing the strafing, bombing and transport jobs. The statements from these men, whose home addresses identify them with all parts of the United States, is testimony which substantiates the formal communique from the headquarters.

The importance of the individual in a news release from the fighting front should never be overlooked. Almost without exception, the people of the United States are interested in what the individual fighting man is going through in any action. In the individual, the people at home see themselves reflected. A soldier, sailor, airman or Marine does not have to be known personally for his words to carry weight. The mere fact that he comes from a particular town or state is sufficient to arouse local pride or interest.

A third essential is a schedule of informative round-up briefings once or twice daily which present the best available picture of overall activities in the combat zone. These sessions are conducted in the Far East by public information officers—a procedure which, in my opinion, is acceptable but not the best solution to the problem. The briefing of newsmen would best be done by the same officer who briefs the commanding general—within security limitations, of course.

This places information to correspondents on indisputably solid ground since the press would then be operating on the basis of the same facts which the commander uses to conduct his military operations.

Fourth, all possible facilities—information, transportation and communications—should be provided for the correspondents. It must never be forgotten that these are the few who speak to and for the millions who read or hear them. A steady flow of accurate and timely information is grist for the correspondent's mill.

I have known but few working newspapermen and their colleagues of the other media who are not friends of the Armed Forces. I have known fewer who could be "taken in" for long. I have known none who could be threatened or cajoled permanently out of a story or who did not respond to help by being helpful.

Therefore, a free and constant flow of information in the Korean operation has been a matter of continuing concern. The communique with its detail and accuracy; the personal exploits and quotes from individuals that add color to the communique; the briefings—all these help newsmen, and in helping them we lay an open book before the public.

Communications facilities over which the news flows are vital. Having been provided the data for stories, the correspondents must have the means to dispatch releases or their work—and our efforts—will have been in vain.

Early in the action, the correspondents in the field had to depend upon one telephone line from Korea to Tokyo. Military communications also were being sent over the same line. When emergency situations demanded, the press quite understandably had to forego, delay or abbreviate its stories in deference to military requirements. This meant that many a correspondent's story went to the guillotine, his release frequently being decapitated with the lead arriving in Tokyo and the truncated body remaining in Korea, whacked off on the other side of the blade. This situation, incidentally, is now on the way to correction with the correspondents being provided a commercial channel of communication similar to that in use in Europe during World War II.

In addition to smooth-flowing communications channels, the correspondents must have access to troops so that they may observe scenes of action. This implies transportation—jeeps,

planes, ships or whatever the situation requires. And these vehicles must be in sufficient supply.

The jeep is the main means of travel in Korea. From my experience in operating press camps, I believe that vehicles should always be pooled under the control of the press camp and never in the headquarters motor pool. The dispatcher then is never called upon to decide whether press or military personnel get the last remaining jeep. Such an arrangement, of course, depends on the overall availability dictated by the military situation. A ratio of one jeep to every one and a half correspondents in the area is the most practical working arrangement. This allows some vehicles to be dead-lined and permits the individual correspondent to pursue his own story unencumbered by jeep mates who may be from some competing news agency.

Another matter of concern in the handling of press relations in Korea is that of providing personal conveniences for the correspondents. In a land where even board floors are a rarity in most houses—if indeed you can find a complete house—comforts of home are out of the question. If it rains, it is muddy. If it does not rain, it is dusty. Bathing facilities are scarce. Despite the lack of facilities, however, a diligent effort is being made to minimize the discomforts suffered by the newsmen.

During the initial phase of the operation, our immediate problems were four-fold—to handle administrative details, to set up a flow of information, to guarantee communications and to provide and manage transportation. At best we were doing business under the most difficult of circumstances. Then, too, it was hard to win any public esteem when losing only six miles of ground was a good day.

Now, as the tide of victory mounts, the public awaits even more eagerly the news that heralds the approaching end of the current unpleasantness. Through the assistance of the public information officers and their staffs, the more encouraging news of today is flowing in an unceasing stream to the world audience.

You have not converted a man because you have silenced him.

Viscount Morley

WHAT ABOUT YOUR PERSONAL AFFAIRS?

THE company commander was facing a delicate problem in personal guidance. With his company alerted for overseas movement, he had been checking to make sure that his men had their personal affairs in order. One Private First Class stoutly maintained that he "had nothing to put in order—no parents, no wife, no estate." Why should he bother about making a will or taking out insurance or anything of that nature? If he lived he had nothing to worry about; if he were wounded the Army would take care of him; if he were killed the Army would bury him. So why bother?

A talk with the man showed, however, that he had listed a sister as next of kin and that he was contributing to her support; that he had an automobile he planned on storing; that he also had a good watch, considerable civilian clothing and even a small bank account. The company commander patiently explained that even if the soldier were an orphan with no relatives and possessed even less worldly goods, merely by virtue of being a member of the Armed Forces he still would have a certain "estate" which would have to be disposed of in case of his death. Further, he explained that the Army provides certain emoluments and privileges for all qualified servicemen—benefits which his family had a right to know about.

Similar situations are frequently faced by company commanders throughout the Army in dealing with men who, in following the line of least resistance, fail to protect themselves. To overcome any such inclination, the Army makes it as easy as possible for all its members to know what should be done in order to put their personal affairs in order.

Toward the safeguarding of one's personal estate, these measures are advisable:

As soon as possible after entry into military service, the individual should gather together all pertinent papers—birth certificate, marriage certificate, other family records, income tax records, job records (showing dates and places of previous

employment under Civil Service or Social Security), insurance papers, property ownership records, records of other valuables such as stocks, bonds, bankbooks, mortgages, automobile ownership, and the like. The papers should be stored in a safe place and a record indicating where they are stored should be supplied to a relative, trusted friend or attorney.

A properly executed will assures the distribution of property to survivors and next-of-kin according to the serviceman's desires. Moreover, it facilitates the settling of his estate. The will should be prepared with the assistance of legal counsel and its contents should be reviewed periodically. It should be kept in a safe place and its whereabouts made known to a relative, executor or other person. If this is not possible, it may be deposited for safekeeping with the Department of the Army. In such cases, the will should be enclosed in a sealed envelope bearing the notation: "Will of (*name and grade*), ASN, to be delivered to (*name and address*) in the event of death." This should be mailed in another envelope to The Adjutant General, Department of the Army, Washington 25, D. C.

In many instances a soldier may desire to arrange that his wife or other heir or dependent may be assured of immediate access to funds. This can usually be done by opening a joint bank account or by placing property jointly in his name and that of the designated beneficiary.

Sometimes a man may feel it wise to give a trusted relative or friend a power of attorney which authorizes such person to act as his agent. In view of the possibility that the power so granted may be abused, it should be given only after careful consideration and after consulting a legal counselor.

Some men, of course, have their own lawyers. But many—probably most—have never dealt with legal matters before. To fill this need, the Army has appointed commissioned officers who are also attorneys as Legal Assistance Officers in most camps, posts and stations. In some localities, the state or county bar association has arranged for legal assistance to service personnel. If a soldier or his dependents can not secure legal advisers, he or they may address a request for legal advice or assistance to The Judge Advocate General, Department of the Army, Washington 25, D. C.

Military personnel are urged to protect their families by insurance. Many men already may have adequate civilian insurance with commercial firms but many of the younger men

YOUR PERSONAL CHECKLIST

PREPARING THE RECORD

Make a checklist of all your valuables and belongings. File it in a safe place.

PREPARING A WILL

Consult your Legal Assistance Officer or private attorney. If desired The Adjutant General, Washington 25, D. C., will hold your will in a safe place.

POWER OF ATTORNEY

See your Legal Assistance Officer or private attorney. Legal counsel is vitally important in making this commitment.

INSURANCE

See your Insurance or Legal Assistance Officer. In matters pertaining to National Service Life Insurance (NSLI), the nearest office of the Veterans Administration can also provide counsel. NSLI offers from \$1000 to \$10,000 insurance coverage, in multiples of \$500, with premiums payable by allotment from service pay. Insurance holdings—both NSLI and commercial—should be recorded on checklist of belongings.

ALLOTMENTS

Legal Assistance, Finance or Commanding Officer can provide information: (See "Aid for Dependents," page 51.)

FINANCIAL ASSISTANCE

Legal Assistance, Commanding Officer or Red Cross Field Director can provide counsel. Dependents may apply to American Red Cross local chapter or Army Emergency Relief.

TRANSPORTATION OF DEPENDENTS AND HOUSEHOLD GOODS

Dependents should be notified of rights, including transportation for families of officers and enlisted personnel of the top three grades (or personnel in grade E-4 with seven or more years of service) granted upon permanent change of station. Rights also applicable to dependents of all enlisted personnel who become prisoners of war, wounded, besieged or beleaguered. For details, see Commanding Officer or Transportation Officer.

DEPENDENTS HOUSING

Commanding Officer or American Red Cross Field Director can provide information.

LOSS OR DAMAGE TO PERSONAL PROPERTY

Consult Claims or Commanding Officer.

VETERANS' BENEFITS

Veterans Administration, TI&E, Legal Assistance or Commanding Officer can provide information.

coming into service have given no thought to this. For all military personnel, the National Service Life Insurance offers from \$1000 up to \$10,000 coverage, in multiples of \$500, at low rates. This may be "term insurance"—that is, very low cost insurance over a term of years only—or regular insurance which builds up an estate and loan value over a period of time. Term insurance may be converted into various forms of permanent insurance. The Insurance Officer or a representative of the Veterans Administration can assist the serviceman in selecting insurance; and the Insurance Officer also can give advice on civilian insurance matters. Provisions also are made for insuring payment of premiums by allotment while in the service.

Under the Soldier's Deposit program, enlisted persons in active service may deposit savings in cash with any disbursing officer in sums of not less than five dollars each, and larger amounts in even dollars. Interest is paid on such savings at the rate of 4 per cent. Repayment is made on discharge, retirement, transfer to an inactive status in a reserve component or when settlement is made in case of death in service.

A step often overlooked in arranging personal affairs is the privilege of making allotments from one's pay. Allotments may be made for support of dependents, for the purchase of U. S. savings bonds, for paying life insurance premiums, for making regular payments to savings banks, loan associations, certain relief agencies and for other purposes. Under provisions of the Dependents Assistance Act of 1950, the Government supplements the allotments made by enlisted personnel to provide for the support of wife, parents and children. (See "Aid for Dependents," page 51.) If the individual is listed as missing, allotments may be continued by action of the Secretary of the service to which he was attached. It is therefore important that the individual assure his dependents of protection by making allotments according to a definite plan.

Medical care and hospitalization for dependents is extended by service medical installations when facilities and sufficient medical personnel are available. The serviceman should advise his family to make application to the commander of the nearest medical facility in advance. Some charges are made for hospitalization but none are made for out-patient treatment. Army, Navy and in some instances other hospitals are available to dependents of Armed Forces personnel. The local Red Cross chapter will give guidance.

Certain benefits are granted to dependents in case of the serviceman's death. Military personnel who die while on active service, veterans and retired personnel are entitled to burial in a national cemetery. But if the family desires burial in a private cemetery, up to \$75 may be allowed toward burial expenses, plus a regulation headstone, upon written request to the Quartermaster General. The widow and minor children of a serviceman who dies while in the Army also have certain burial rights in national cemeteries.

Gratuity pay equal to six months' base pay is paid by the Army to dependents in cases of death in the service. The Army also turns over the serviceman's personal effects to the person entitled to get them.

Certain pension benefits, which vary according to circumstances, also are paid to widows and dependent children. The Veterans Administration or the local Red Cross chapter will assist the family in such matters.

The family of a deceased serviceman may enter claims for any loss, damage or destruction of personal property which the soldier may have suffered while still in the service. Legal Assistance or Claims Officers at any Army installation will help the family file such claims.

Another benefit which the man's family should be told about is the right of transportation and shipment of personal effects. In some cases dependents of persons in the Army who die or are injured, captured or even besieged or beleaguered, may be moved at Government expense to any place in the United States where they desire to establish another permanent residence. The family should check with the nearest Army post or with the Chief of Transportation.

The Army Emergency Relief is organized to help Army personnel and their dependents. Each case is determined on its merits. The Army Relief Society, closely affiliated with the Army Emergency Relief, is organized to help needy widows and orphans of deceased Regular Army personnel, whether active or retired. Needy survivors may apply for assistance to National Headquarters, Army Relief Society, Empire State Building, 350 Fifth Avenue, New York 1, N. Y.

In any other matters involving compensation and pensions, disability retirement pay benefits, education and training, hospitalization, burial rights, insurance, loans or readjustment allowances available to the serviceman or his dependents, the Veterans Administration should be consulted.

AID FOR DEPENDENTS

WITH the signing by the President of the Dependents Assistance Act of 1950 (Public Law 771—81st Congress), a schedule of family allowances was placed in effect designed to ease the financial burdens of enlisted personnel in the lower grades, including those family heads who may be inducted from reserve components or under Selective Service. The new allowances are retroactive to 1 August 1950.

Under the Act, personnel will make allotments from their pay ranging from \$40 to \$80, depending upon grade. These will be matched by sufficient Government funds to provide allotments to dependents ranging from \$85 to \$165.

The Dependents Assistance Act of 1950 is not designed to duplicate the family allowance provisions of World War II under which a specified sum was granted for each dependent without limit as to the number of dependents. Actually the current Act is an enlargement of quarters allowances set up under the Career Compensation Act of 1949, which completely revised the pay scales of all military personnel. No changes in other allowances or privileges are made.

The new provisions call for enlisted personnel in pay grades E-1, E-2 and E-3 to allot \$40 a month; those in E-4 and E-5 will allot \$60; and those in E-6 and E-7, \$80. The Government will supplement these allotments to make payments as follows:

Pay Grade	Monthly Pay	Amount of Deduction	Total Allotment to Dependents		
			1 Dep.	2 Dep.	3 Dep.
E-1	\$ 80.00	\$40	\$ 85.00	\$107.50	\$125
E-2	82.50	40	85.00	107.50	125
E-3	95.55	40	85.00	107.50	125
E-4	117.60	60	127.50	127.50	145
E-5	139.65	60	127.50	127.50	145
E-6	169.05	80	147.50	147.50	165
E-7	198.45	80	147.50	147.50	165

In drawing up this allotment plan, Congressional leaders envisaged the granting of deferments to heads of large families and possible hardship discharges for those with more than three dependents. Each service now is drawing up appropriate regulations and rules covering all of these contingencies.

The new quarters allowances will not be paid to any service person while he occupies adequate Government quarters with his dependents. Dependents are defined as "lawful wife; unmarried legitimate children under 21 (or over 21 if incapable of supporting themselves); and father and mother if proven dependent." Dependent parents do not have to reside with the serviceman to qualify for this allotment. For enlisted women, husbands actually dependent upon them for more than half their support come under the definition.

The new scale of allowances is not applicable to Philippine Scouts and similar forces nor for civilian component personnel who may be on training duty. For purposes of this Act, aviation cadets of the Navy and Air Force are considered as E-4. Money allowance for quarters (MAQ) for enlisted personnel with no dependents remains at \$45.

Under provisions of the Act, the Secretary of any service may prescribe payment for quarters allowance even though the enlisted member's pay is forfeited or does not accrue because of unauthorized absence, misconduct, disciplinary or other reasons. The Secretary concerned, upon application by a dependent, is authorized to direct payment of basic quarters allowances in certain cases where the enlisted member "either is unable to claim such allowances or refuses to provide for the support of his dependents." The Act will expire 30 April 1953 unless extended by Congressional action.

TYPES OF ARMY ALLOTMENTS CURRENTLY AUTHORIZED

CLASS B—for purchase of Series E United States Savings Bonds. May be written locally at individual's home station only.

CLASS D—for payment of premiums on U. S. Government Life Insurance in effect before the advent of the Class N allotment in 1940.

CLASS N—for payment of National Service Life Insurance premiums.

CLASS E—for making regular cash payments to dependents, commercial insurance firms or saving banks; for repayment of Red Cross, Army Emergency Relief or FHA loans. Class E allotments, however, may not be used for paying installment financing agencies.

CLASS F—for family allowance allotment established during World War II, under which the Government supplements the serviceman's allotment to wife, parents or dependent children according to a fixed scale without limit as to number of dependent children. Continuation of this type of allotment is subject to the provisions of the Career Compensation Act of 1949.

CLASS Q—for compulsory type allotment, established by the Dependents Assistance Act of 1950, applicable to service personnel not eligible for inclusion under the Class F category. For schedule of deductions and allotments, see preceding article.

THE SOVIET MILITARY ORGANIZATION

II—Rise of the Soviet Army

THE Civil War in Russia produced a group of self-made strategists who believed that they had discovered a new revolutionary military doctrine which relegated to the past the theories of the old army generals. This group of Communist militarists was led by Mikhail Frunze and included Voroshilov, Gusev, Tukhachevsky and many others. In opposition to Frunze stood the belligerent Trotsky who was supported by some of the ablest military thinkers of the old army. Disregarding the possible consequences of opposing the ardent young Communists, Trotsky vigorously fought against this revolution in military doctrine which held that the Red Army should abandon all methods of warfare based on old foundations. The ideas which stood in conflict were many.

The pure Communists, militarily immature but nonetheless recently successful leaders in mobile campaigns of the Civil War, believed that they could overthrow conventional military theories and doctrine in the same manner that they had caused a political upheaval. They looked to Karl Marx for guidance but finding little there, they turned to Engels who had taught that the emancipation of the proletariat would create new forms of warfare. However, they overlooked a fact that Engels had pointed out—that it would take time to introduce drastic changes. Young leaders of the Red Army were deficient in knowledge of military history but nevertheless they wanted a militia-type army. They visualized wars of maneuver employing small bodies of forces and they held that their army should be the first to attack.

Trotsky contended that Soviet Russia, weakened as she was by years of warfare, should encourage military studies and create and arm a large well-trained army for defensive purposes. He and his supporters viewed the problems in terms of more maturity and experience. The arguments grew in intensity until the military issues became political ones. Trot-

sky's fiery arguments that the Soviets must learn the ABCs of the military art before creating new doctrine fell on deaf ears, alienating him from the commissars and political leaders and widening still further the breach between the old and new army officers. It was obvious that if Trotsky's group won out the former Tsarist officers would be in the ascendancy in the new army. But "Marxian" military doctrine prevailed. Trotsky failed to complete the postwar reorganization of the Red Army along the lines which he championed. In 1924 Frunze became the *de facto* chief of the Red Army. He had proved his military skill in the Civil War and later demonstrated organizational ability as he built up and reshaped the armed forces in 1924 and 1925.

The Soviet War College had by this time graduated new general staff officers but since they lacked experience Frunze wanted to retain the old army officers. These former Tsarist officers, however, were considered by the Red clique of commanders as being apart from them. The cleavage had been made and time was all that was needed to eliminate them and give the army its "purer complexion."

Frunze invoked a series of important reforms which were to have lasting effect on the future fighting capabilities of the



Keystone View Company



National Archives

Militarist Mikhail Frunze (left) succeeded the deposed Leon Trotsky (right) as War Commissar in 1924.

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National Archives

Early units of the Red Army marching through the streets of Moscow. By 1921 the Red Army strength exceeded 5,000,000 men.

army. Great efforts were made to "polish" and school those politically reliable officers who lacked formal and military education. The entire administrative structure of the army was simplified and recast. To build reserves a standardized system for military service was established.

The army was placed on a territorial-militia basis with about one-third of its strength placed in the regular army. This system was adopted primarily for budgetary reasons since the upkeep of a regular army soldier cost about two and one-half times that of a territorial militiaman.

From its inception the Soviet government sought to make the Red Army new, to distinguish and disassociate it entirely from the pattern of the Tsarist army. Where the Soviets did range back in history for military antecedents, they delved far back, as is illustrated in the adoption of the peculiar head cloth that characterized the Red Army uniform of the 1920s. This item of headgear resembled the old Slavic helmet worn by legendary Russian heroes of antiquity.

Having brutally disposed of the White forces during the Civil War, the Communist Party and military circles sought from the past history of the Russian army the reasons for the humiliating defeats of World War I. The conclusion was

reached that the previous system of discipline was outmoded and that too little attention had been given to the life of the soldiers. Having successfully fought to destroy all aspects of the Imperial Russian Army and its traditions, the Soviets could not then say that Suvorov had led a similar reform in respect to soldiery. The Soviets clearly recognized, however, that Suvorov had established a precedent. In World War II the Soviets were to revive and glorify the Suvorov legend.

In the early 1920s all of the old forms of military discipline had been completely discarded. Even officer titles were no



Many propaganda devices including a controlled press were—and still are—used in the indoctrination and ideological development of Soviet troops and the home front.

longer in use. It was an army of salaried classes and no ostensible officer ranks.

There were still dissident elements in Russia and the loyalty of the army had to be insured. Thus a political and cultural campaign was launched to indoctrinate the army thoroughly and associate it more closely with the people. The political administration of the Red Army grew into a giant apparatus that managed and directed propaganda trains, unit libraries, show troupes, newspapers and a variety of other political and cultural activities. The Central Theater of the Red Army was established in Moscow. The regimental clubs for officers and soldiers were managed by commissars and exploited as instruments of propaganda. The political administration of the Red Army established a system of military newspapers. The central organ of the army then as now was *Red Star*. In addition many military districts, army corps and divisions had their own dailies while regiments published weekly or semi-weekly journals. Factories and theaters were made sponsors of military units to insure a closer tie between the civil and the military. Thus the Soviets energetically welded together their military force whose strength after the Civil War was maintained for a number of years at 562,000.

There was one factor, however, which disturbed the Soviets. Despite efforts to build and maintain the army according to their own methods and abilities, they continued to rely partly on the military specialists who were holdovers from the Tsar's army. Even Stalin for all his much-touted military talent in the Civil War had only directed a few thousand men and none of the Soviets in power had thorough military backgrounds.

To improve further the position of the commanders, definite limitations were placed on the powers of the political commissars in the 1924-25 period and the principle of unity of command was partially established. Beginning in 1925, the Army was able for the first time to plan and systematize its training program and to standardize its equipment.

Beyond the reforms of Frunze which were carried on after his death by Voroshilov, the greatest impact on the organization and composition of the Red Army resulted from the industrialization of the USSR under the Five Year Plans. Both Frunze and Voroshilov repeatedly stressed the fact that the technical equipment of the Red Army was inferior to that of many European nations. During the first decade of Soviet power the backwardness of Russian industry prevented any

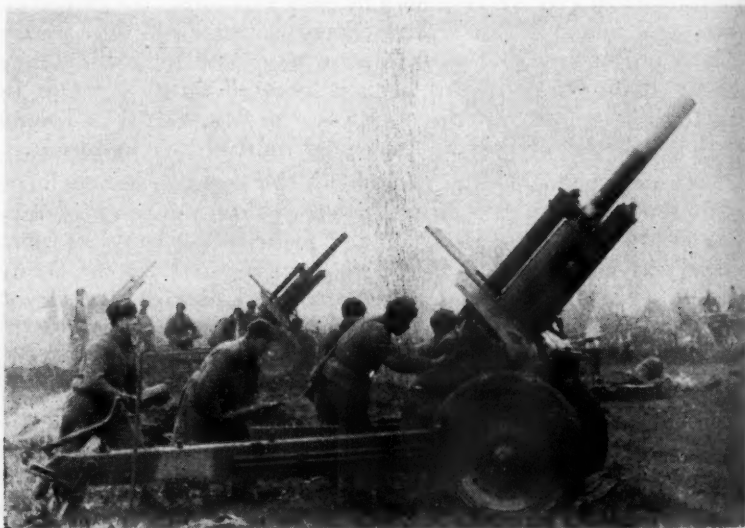
marked improvement of the Soviet position. However, under the Five Year Plans which began in 1928 the USSR provided its army with improved weapons and modern equipment. There was a gradual increase in the mechanization of the army.

In 1934 the Commissariat of the Army and Navy was reorganized and redesignated the Commissariat of Defense. The general command structure of the army was adjusted to the demands of increasing mechanization and modernization.

The General Staff Academy was established in 1935. The white and red colors of the old imperial general staff were given to the members of this academy as were other old uniform distinctions. In 1936 officer titles and regular promotions were reintroduced in the Red Army.

Russia's leaders put their faith mainly in the ground forces. Both the Soviet air force and navy still are considered to be of secondary importance to the army.

The Soviets were attentive to future developments. They were the first nation to experiment on a large scale with airborne troops. During Kiev maneuvers in 1934 an infantry brigade was dropped from aircraft for the first time in military history. German army observers witnessed this experiment. The Germans later developed the airborne technique well beyond that of the Soviets whose small number of airborne troops



Artillery was employed extensively by the Soviet Army in World War II to repel Hitler's armies in the East.

were unskillfully employed and decimated in World War II.

The artillery arm received considerable emphasis as the Red Army progressed in organization and strength. A variety of good weapons was developed and manufactured in quantity. Stalin favored artillery and labeled it the "God of War." Frunze gave the arm its early impetus.

Soviet military chiefs placed considerable faith in the cavalry. They enlarged the cavalry to about forty divisions by 1940 and progressively armed it with heavier weapons which gave it the staying power that the lance-minded Polish army lacked in 1939.

The great Red Army purge of 1937 struck the Soviet people like a thunderbolt and greatly shocked the world. The Soviet newspapers headlined "For Espionage and Treason to the Fatherland—Execution by Shooting." Eight high-ranking Soviet generals including Marshal Tukhachevsky had undergone trial and were shot. The purge did not stop here. Seven military district commanders disappeared as did Marshal Bluecher, the renowned, talented and popular commander of the Far Eastern Red Banner Front. His exact fate is still unknown. Smirnov, the Navy Chief, also vanished along with the Deputy Commissar of Defense, Marshal Egorov, and the head of the military aviation. The bloody purge went deeper into the Red Army. It has been estimated that more than 30,000 of the commanding officers of the Army and Navy were executed or imprisoned. For the most part these officers were never seen again but there is one known exception. General Rokossovsky—a cavalry corps commander in 1937—returned from prison-exile in World War II to become a marshal.

The purge made it evident that a conflict of major importance had arisen between a large section of the Red Army leaders and Stalin's clique and that the political machinery designed to insure army loyalty to the Party had failed. By its mass executions the Soviet government indicated its own fear of opposition and its brutal strength of suppression. Even before 1937 the former Tsarist officers had lost a great deal of their influence and numbers but after the purge they were exceedingly rare within the Army.

About two years before the purge the commissars were professionalized by a decree which placed them in nine graduated ranks to correspond with commanders. The *Politruc* (political director) served the lowest elements while commissars were designated for battalion and higher units. Privates could be



U. S. Army Photograph

The historic link-up of American and Soviet troops in April 1945 hastened victory in Europe.

politruks, thus opening the way to power for active Communists in the lowest ranks. Decrees concurrent with the purge of 1937 reinstituted the commissars in positions of dominant control as a precaution against future disaffection. Fear and suspicion followed in the wake of the purge. Discipline was unfavorably affected. In some units the burden of maintaining discipline fell on the commissars. The prestige of military commanders had reached a new low.

Having found new organizational form under the administration of Marshal Voroshilov, Commissar of Defense from 1927 to 1940, the Red Army began to increase in size. By 1934 the announced size of the standing army had increased from 562,000 to 940,000. In 1935 the Army rose to 1,300,000 and in 1938 the territorial-militia system was abandoned as the Army was placed on a regular basis. By 1939 the Red Army was more than 3,000,000 strong.

In this period the Red Army had tested some of its men and equipment in the Spanish Civil War and skirmished with the Japanese army. The Red Army finally fought the Japanese in the Far East in two large engagements—at Lake Khasan in 1938 and at Khalkhin-Gol in 1939. It was in these battles that Marshal G. K. Zhukov gained early fame and the Soviet armored forces surprised the Japanese. Here the Soviets had also developed and used an underwater bridge.

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For the purpose of buying time against Hitler and not the least hesitant to acquire new territories in Europe, Stalin concluded a non-aggression pact with Germany in August 1939. Soviet troops marched into Poland.

In contrast to the USSR's claim of inadequate military preparation for defense of its borders was her aggressive and unwarranted attack on Finland in November 1939. The world witnessed a poor showing of Soviet military might against a power inferior in numbers and armament.

The debacle of the Finnish war caused many changes in the Soviet Army. Marshal Timoshenko, who finally managed to break the strong Mannerheim Line, replaced Voroshilov as Commissar of Defense.

Having emerged the victor in the Finnish war the Red Army recognized the degree to which it had been outfought. A period of reorganization and change set in. Disciplinary Marshal Timoshenko quickly introduced much-needed reforms the first of which was the abolition of political commissars in August 1940. This change was motivated by the fact that the commissars had interfered in the proper execution of military assignments during the war against Finland. A new and more severe Disciplinary Code replaced the one of 1925. The salute was reinstated.

The Russian Army that Germany was soon to cut up and force backwards was a different army from the one which had suffered ignoble defeat at Tannenberg, yet it had some of the traditional Russian military defects. At the outbreak of war the leadership of the Soviet Union's three giant army groups was in the hands of Budenny, Voroshilov and Timoshenko—trusted comrades of Stalin in the Civil War. The army groups were too big and unwieldy in proportion to the talents of the men who led them, but Russia could replace the hundreds of thousands of men lost and there were others who could step into the shoes of those leaders who failed. The Red Army was ill organized. For all of its 22,000 tanks, the Army's armored power was not in a combat form to deal effectively with the 2000 German medium tanks to be committed against it. Two-thirds of the Red Army tanks were lost in the first few weeks of the war. The essential difference between German success and Soviet failure lay in the employment of armor. The purge of 1937 was still felt. The Red Army had young and aggressive leaders but their initiative had long been stifled.

However, the Red Army was to correct these deficiencies



U. S. Army Photograph

Rapid progress in modernization of Soviet combat forces in World War II is typified by these heavy tanks entering Leipzig, Germany, for occupation duty.

in 1942 and 1943 when the rear services were reorganized. Armor was built up and formed into effective tank and mechanized armies. In mid-war the Army was to correct its deficiency in mortars and raise its morale by the introduction of new decorations and uniforms which copied those of the Tsarist armies. The guard unit system was revived. Like Napoleon, Stalin was to create many marshals—29 altogether.

And as the Red Army grew into its strength of many millions, the Communist Party conducted a campaign within the Army to recruit new members. The Party could not afford to let the military become too strong.

The memory of Russian participation in World War II is still fresh. Hitler's armies crossed the Soviet border in great strength on 22 June 1941. Suffering early reverses, the Red Army reeled before the German onslaughts in apparent disorder. At times, however, that same Army brilliantly executed difficult withdrawals in the face of overwhelming Nazi might. Men, materiel and space were sacrificed extravagantly to gain time to strengthen her defenses and at the same time soften the effects of German surprise and military superiority. Russia's employment of a "scorched earth" policy and her skillful use of guerrilla-type warfare further complicated the German offensive.

The German timetable received a setback in the fall of 1941 as the Red Army stiffened before Moscow and bitter cold made more difficult the operations of the *Wehrmacht*. An ever-growing stream of lend-lease weapons and equipment from the United States was added to fresh war supplies from Russia's relocated industries east of the Urals to bolster the grimly resisting Red forces. The sieges of Leningrad, Sevastopol and Stalingrad are symbols of the determined resistance of the Red Army. The 162-day siege of Stalingrad ended in January 1943 to turn the tide in favor of the USSR. Some 330,000 German troops besieging the city were encircled and the forces of von Paulus were either captured or destroyed.

After Stalingrad, the victorious westward march of the Red Army began. One by one the fallen cities of Voronezh, Kharkov, Rostov, Sevastopol, Odessa and Kiev were rewon by the Russians. In all nearly 700,000 square miles of Russian territory were cleared in three years of fighting. Soviet and German personnel losses numbered in the millions by mid-1944. In addition, tens of thousands of tanks, guns and planes were lost on both sides.

While the team of General Bradley and Marshal Montgomery drove toward Berlin across the north German plains and the armies of Generals Patton and Patch spearheaded through



U. S. Army Photograph

Despite mechanization (opposite page), the Soviet Army relied heavily on horse-drawn transport. This column formed part of the same occupation force entering Leipzig, Germany, in 1945.

south Germany, Marshal Zhukov's forces closed in on the capital from the east in the spring of 1945. Surrounded and beaten, the decimated German forces surrendered unconditionally to the Allies on 8 May 1945.

The lessons of World War II left their imprint on the Soviet Army. From them sprang new combat tactics and improved design and production of war materiel with special emphasis on tanks, artillery pieces and other ground force weapons.

The Soviet Army entered the postwar period as the most powerful ground force in the world. Certain deficiencies remained in the areas of technical equipment, technical skill and in the professional qualifications of many of its officers but these shortcomings were being corrected.

Although the postwar Soviet Army ground force was reduced to perhaps less than one-third of its VE day strength, it had much greater mobility without having sacrificed its hard-hitting capabilities. This smaller force retained approximately the same number of organic tanks as in the larger establishment. While many inferior infantry units were being inactivated, other infantry divisions were built up with increased transportation, greater artillery firepower and the addition of organic armored elements.

In 1946 the USSR reorganized its armed forces by integrating the Army (along with its air arm) and the Navy into a single Ministry of Armed Forces. Under the provisions of the reorganization decree, the newly unified Soviet Armed Forces were comprised of equal components—ground, air, naval and supply. Despite this theoretical equality, however, the new Armed Forces General Staff was made up primarily of officers from the ground force. Nevertheless, the reorganization placed greater emphasis on the roles of the Soviet Air Force and Navy in future wars.

This is the second article on "The Soviet Military Organization." The next article will describe the Soviet soldier and his leaders.

ARMY LANDMARKS

West Point

The military history of West Point—the home of the United States Military Academy—dates back to the days of the Revolutionary War. From a small garrison first commanded by General Samuel Holden Parsons in 1778, it has grown into its present status as a national institution training officers for the United States Army and Air Force.

During the American Revolution, command of the hills known as the Hudson Highlands meant control of traffic on the Hudson River and movement along the roads which hugged the river bank. The first fortifications in this area were erected on Matalaer's Rock, directly across from what was referred to as "The West Point." This "Rock," subsequently named Fort Constitution, is today known as Constitution Island.

It was not until after the British had captured the area and destroyed the fortifications at Fort Constitution that it was decided to fortify "The West Point." The British controlled the area for only twenty days, since their defeat at Saratoga forced them to return to their base in New York.

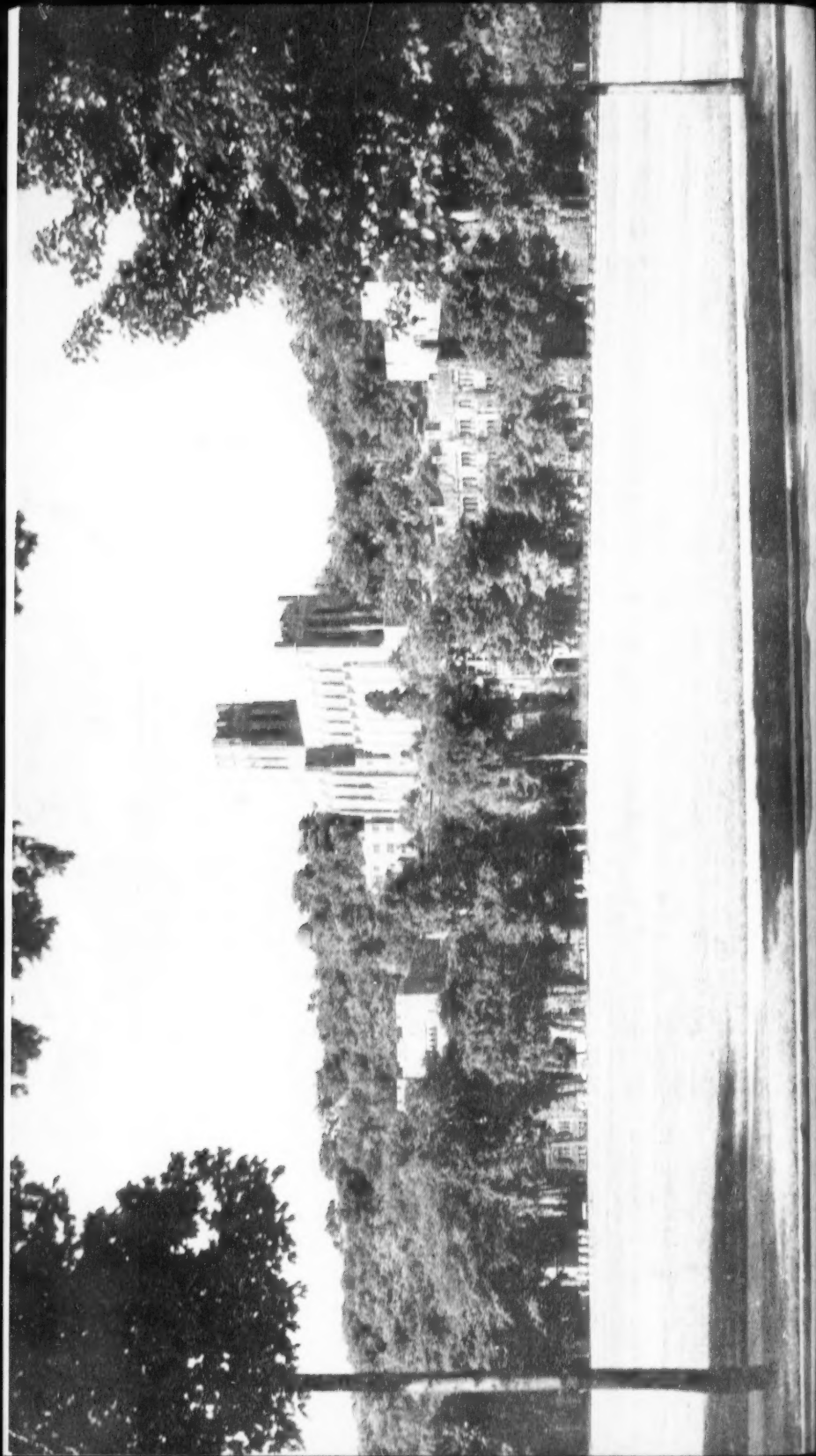
The last successful British effort to invade the Highlands took place in May 1779, when they seized Verplanck's Point and Stony Point. Shortly thereafter, on 25 July 1779, Brigadier General Anthony Wayne in a daring move recaptured Stony Point with the entire enemy garrison and stores. Washington, who lauded "Mad Anthony's" success and looked upon West Point as "the most important Post in America," then transferred his headquarters to West Point to conduct the defense. It was here that the infamous Major General Benedict Arnold conducted his negotiations with Major John André to sell West Point to the enemy.

An Act of Congress of 7 May 1794 created the rank of cadet in the Army. Several cadets were assigned to the Corps of Artillerists and Engineers at West Point. In effect, they were junior officers with the right to command, to sit as members of courts-martial and to employ servants or waiters. As they became proficient, they became full-fledged officers. It was not until 1802, however, that West Point became the home of the United States Military Academy. George Washington first made the suggestion which led President Thomas Jefferson and the Congress to establish the Academy.

From its earliest days, West Point has trained the great military leaders of America. Among its outstanding graduates are General Ulysses S. Grant, General Robert E. Lee, General Philip Sheridan and General of the Armies John J. Pershing.

(Picture on back cover.)

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